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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/737,111	10/25/96	ROREGER,	M 1408/LTS-8/9

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WENDEROTH, LIND & PONACK
2033 K STREET N. W. SUITE 800
WASHINGTON DC 20006

EXAMINER

WEBMAN, E

ART UNIT

PAPER NUMBER

1617

14

DATE MAILED:

12/23/98

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UNITED STATES DEPARTMENT OF COMMERCE
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 14

Application Number: 08/737,111

Filing Date: 10/25/96

Appellant(s): Michael Roreger

John T. Miller
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed 10/7/98.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

Art Unit: 1617

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Applicant specifies that the claims stand or fall together.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

Art Unit: 1617

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,619,913	LUCK ET AL.	10-1986
4,789,663	WALLACE ET AL.	12-1988

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 16-30 are rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office action, Paper No. 8.

(11) *Response to Argument*

Applicants argue that Wallace et al. does not teach a distribution of collagen of different molecular weights. However, the Examiner asserts that such a distribution occurs in the Wallace et al. method of preparation. Collagen is a protein with a molecular weight of about 130,000. It consists of three polypeptide chains wrapped around each other in a triple helix. Each polypeptide is a linear chain of amino acids, each amino acid being one of twenty known amino acids. Parenthetically, it is the sequence of amino acids that determines

Art Unit: 1617

the three-dimensional structure of a particular protein. That sequence is genetically determined. Enzymes are proteins which act as catalysts of chemical reactions. Trypsin is an enzyme which catalyzes the cleavage of other proteins. Trypsin cleaves proteins at specific locations, namely wherever the amino acids arginine or lysine are located. Thus, in digestion of a protein such as collagen with trypsin over time, trypsin will cleave at an increasing number of sites lysine and arginine sites, producing smaller polypeptide chains as the number of cleavages progresses. The process of chain length diminution can be followed by chromatographic processes such as gel electrophoresis. This enzymatic protein process of digestion, producing polypeptides of decreasing length overtime, is well-known to one of ordinary skill in biochemical art.

Art Unit: 1617

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

WEBMAN; aco
(703) 308-4432
December 18, 1998
December 21, 1998

WENDEROTH, LINK & PONACK
2033 K. ST. N.W., SUITE 800
WASHINGTON, DC. 20006